TABLES

Table 1. Process Areas Components: Description, Status, and Proposed Sampling Locations and Analyses

Area of Investigation	I.D. Figure 4 unless noted otherwise	Description and Status	PID/pH Field Screening	Proposed number and type* of sample locations		Proposed Number and Type of Analyses for collected soil samples	
Administration Building	A	The Administration Building contains offices, office storage rooms, restrooms, and a garage. It is currently being used as an office for document storage and for outside contractors overseeing fluids management. In the parking lot approximately 50 feet from the northeast side of the Administration Building, a refilling station pump island with two pumps was removed in 1998. The mine superintendent at the time reported that no product piping was connected to the pumps when they were removed. Documentation was not found as to whether or not underground storage tanks still exist or were removed prior to the pump island removal.	YES	1	S C	1 1	TPH-GRO TPH-DRO
Old Tire Pile	B	Several old haul truck and vehicle tires are stored on the ground in a large pile northeast of the Process Areas.	NO	0	---	0	---
Equipment Wash building	C	This building is next to the Truck Wash and Paint Shop and contains piping lines that were connected to former “cleaning solvent” tanks. A concrete sump sets along the outside east wall of the building.	YES	2	S C	2 2	VOC SVOC
Change House	D	The building was used as a dressing room and showers and is empty except for some dry scraps of materials. A small former lab is present at the north corner of the building.	YES	1	S C	1	ABA/WRA/
School House	E	The School House contains chairs and file cabinets in one half of the building and stored core samples an file storage in the other half. There are restrooms present in the building.	NO	0	---	0	---
Assay Laboratory	F	Chemicals remaining in the Assay Laboratory consist of a two-liter bottle of ammonium hydroxide, some ammonium hydrogen fluoride, and approximately 20 gallons of sulfuric acid. Various laboratory equipment are also present inside the building. The building contains a loading dock along the southwest side of the building, and a basement at the southeast end of the building that is below approximately one third of the first floor area.	YES	1	S C	1 1	ABA/WRA VOC
Large Warehouse	G	The warehouse contains fittings, supplies, miscellaneous scrap steel, debris, and some tools. A two-inch diameter pipe is protruding from the ground at the north corner of the building.	YES	1	S C	1	TPH-DRO
Small Warehouse	H	There are 91 used transformers and oil-filled switches being stored in the Small Warehouse, and most of the transformers have been tagged as containing PCBs.	YES	1	S C	1 1	PCB TPH-DRO
Fire Engine Storage	I	Six large used transformers are currently being stored in the Emergency Shed, and some of these transformers are labeled as containing PCBs. The rest of the building is empty.	YES	1	S C	1 1	PCB TPH-DRO
Grease Shop #1	J	The small building is empty.	YES	1	S C	1	TPH-DRO
Truck Shop	K	The Truck Shop contains 129 55-gallon drums, most of which are empty, and 41 of which are full or partially full drums of used oil and zeolites. The Truck Shop also contains approximately 30 five-gallon buckets containing various oils and oil-soaked trash. Some of the drums are damaged and leaking, some contain dried residue with flammable labels or PCB labels, and at least one drum is unlabeled. At the northwest end of the Truck Shop, three bulk oil tanks approximately 3,000-gallons capacity are present outside the building inside concrete secondary containment. According to a former mine employee, electrical transformers were reconditioned inside the Truck Shop in the 1980's by a company named Unison. A floor trench inside the building contains approximately one foot of oily liquid. A floor drain exits the Truck Shop to the northeast, discharging on to the ground surface approximately 600 feet to the northeast of the building. Several areas are present on the concrete floor where former floor drains have apparently been cemented in.	YES	2 2	S C S D	4 4 4	TPH-DRO TPH-GRO PCB
Equipment Garage	L	An unknown number of 55-gallon drums are stored at the Equipment Garage.	YES	1	S C	1 1	TPH-DRO TPH-GRO
Truck Wash and Paint Shop	M	The building has two large overhead doors where vehicles entered. Some oil staining is apparent on the ground surface outside of the building doors.	YES	1	S D	1 1	TPH-DRO VOC
Carpenter Shop	N	The shop is empty except for scrap supplies and a few tools and equipment. A small concrete sump with a valve is present outside the west wall of the building.	YES	0	---	0	---
Lead Shop	O	The shop is empty.	NO	1	S C	1	LEAD
Leach Vats	P	Eight leaching vats, each 10 feet apart, are shown in Figure 4. Each vat measures120 feet by 135 feet by 20 feet deep, with 18-inch concrete walls and concrete floors. The vats were used to percolate acid leach solution through the crushed ore and, subsequently, the application of rinse solution.	YES	4	S C	4 4	TPH-DRO ABA/WRA
Quonset Hut	Q	A quonset-style building and fenced-in storage yard are present north of the Administration Building. The building and storage yard contain old scrap electrical supplies such as wire, switches, lights, and control equipment. The yard was formerly used to store transformers, and at least one old transformer is still present in the storage yard.	YES	1	S C	1 1	TPH-DRO PCB
Emergency Shed	R	The building is empty except for stored soil samples and scraps of materials.	NO	O	---	0	---

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Sheet Metal Shop	S	The building is empty except for scrap and debris on the floor. An attached shed on the east wall of the building is locked and labeled "Diesel".	YES	1	S C	1	TPH-DRO
Storage Building	T	The building contains scrap piping and a portable generator.	NO	0	---	0	---
Filling Station #1	U	This petroleum filling station consists of two aboveground storage tanks that are not housed in a building. The tanks are currently being used to refuel vehicles. There is one 10,000-gallon tank in secondary containment consisting of an earthen berm and plastic liner, and a second tank of 1,000-gallon capacity with no secondary containment.	YES	1	S C	1 1	TPH-DRO TPH-GRO
Grease Shop #2	V	The small building contains dry scrap and debris.	YES	1	S C	1	TPH-DRO
Filling Station #2	W	Former petroleum filling station. The station has fuel pumps located in the station shed and two two-inch underground lines protruding from the ground outside the southeast end of the building - a possible indication of the presence of underground petroleum storage tanks	YES	1	S C	1 1	TPH-DRO TPH-GRO
Filling Station #3	X	Former gasoline filling station. Plastic-lined floor. The station has pipes protruding from the ground and fuel pumps located in the station shed, an possible indication of the presence of underground petroleum storage tanks	YES	1	S C	1 1	TPH-DRO TPH-GRO
Electrical Shop	Y	The shop contains shelves of electrical equipment and supplies, including wire, fittings, and devices.	NO	0	---	0	---
Used Oil Tank	Z	An 1,800-gallon used oil tank is present north of the Truck Shop. The tank is inside secondary containment, but some oil staining is apparent on the ground surface near the secondary containment.	YES`	1	S D	1	TPH-DRO
Core building	AA	The Core Building is located southwest of the Process Areas and contains several hundred boxes of core samples on shelves. There is no apparent indication as to the nature of prior operations or use of the building. The building is constructed of sheet metal on framework with a dirt floor.	YES	1	S C	1	TPH-DRO
Water Tank	BB	There is a single water tank located northwest of Yerington Pit and approximately 1,500 feet southwest of the Leach Vats. The tank was used to supply water for the mine and for Weed Heights, and is currently out of operation. The capacity and volume of water remaining in the tank is unknown.	NO	0	---	0	---
Primary Crusher foundation	CC	The Primary Crusher was used to crush the ore to a five-inch product before being sent on to the Secondary Crusher, which reduced it to 0.5-inch diameter. All that remains of the Primary Crusher is the concrete foundation and walls. Overhead conveyors transported crushed ore to the ore stockpile north just north of the Primary Crusher, and from the ore stockpile to the Secondary Crusher. The overhead conveyors emerged from the ground next to the stockpile and the Primary Crusher, and concrete structures may be buried below ground.	YES	1	S C	1	ABA/WRA
Anaconda Solution Tanks	DD	The Solution Tanks (DD on Figure 4) consist of concrete floors and concrete walls approximately 18 feet tall. The southernmost Solution Tank is currently being used to store chemicals or petroleum products in approximately 280 55-gallon drums and soils in nine plastic 250-gallon containers. Several of the drums are damaged and/or leaking contents. Some of the drums are labeled as containing PCBs.	YES	3	S C	3 3 3	TPH-DRO ABA/WRA PCB
Precipitation Plant	EE	The Precipitation Plant consisted of fifteen parallel concrete launders filled with light gauge scrap iron that were used to precipitate copper from the leach solution. Each launder measures 10 feet by 58 feet by five feet deep. The entire plant is approximately 600 feet long. The launders still contain some scrap iron. There are several 55-gallon drums stored in one of the launders at the southeast end of the plant.	YES	4	S C	4 1	ABA/WRA TPH-DRO
Solution Tanks Electrical Bldg & Unknown basement	FF	Electrical service equipment for Solution Tanks and Leaching Vats. ABA/WRAndoned.	NO	0	---	0	---
Sulfide Plant Office	GG	Empty except for soil samples	NO	0	---	0	---
Sulfide Plant	HH	All buildings in the Sulfide Plant area have been removed, and only concrete structures remain. These concrete structures cover an area of approximately seven acres (800 feet by 400 feet), and consist of foundations, slabs, columns, trenches, ramps, and thickeners. All of the thickeners have been filled with alluvial material. Two concrete-lined conveyor ways run from the bottom of the sulfide fine ore stockpile, underneath the road, and up into the Sulfide Plant. These conveyor ways, shown on Figure 4, are approximately 175 feet long.	YES	6	S C	6	ABA/WRA
Concrete Ramps	II	Two sloped concrete ramps. The original purpose for the ramps is unknown.	YES	2	S C	2 2 2	TPH-DRO TPH-GRO ABA/WRA
Low area - discolored	JJ	Area at lower elevation than general process areas and surrounding area, where surface shows apparent runoff accumulation.	YES	1	S D	1 1	TPH-DRO ABA/WRA
Low area - discolored	KK	Area at lower elevation than general process areas and surrounding area, where surface shows apparent runoff accumulation.	YES	1	S D	1 1	TPH-DRO ABA/WRA
Drum storage - Tar	LL	This areas contains 23 drums of tar (some leaking on to the ground) stored outside, northeast of the Equipment Garage.	YES	1	S D	1	TPH-DRO
Truck Shop floor drain outlet	MM	The Truck Shop floor drain runs underground from the Truck Shop an open area to the northeast, indicated on Figure 4. The exact nature of fluids transported through the drain is unknown.	YES	1	B D	1 1 1 1	TPH-DRO TPH-GRO VOC PCB

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Stacker area	NN	Conveyance between crushers. Components removed and area graded.	YES	1	B C	1	ABA/WRA
Secondary Crusher area	OO	The Primary Crusher was used to crush the ore to a five-inch product before being sent on to the Secondary Crusher, which reduced it to 0.5-inch diameter. The Secondary Crusher building is present to the west of the Primary Crusher. The Secondary Crusher cones along the north side of the building have been completely removed, but the concrete foundations remain. An underground concrete conveyor way exists underneath the Secondary Crusher cone foundations, between the Secondary Crusher and the ore stockpile just north of the Primary Crusher. Underground concrete conveyor ways are also present between the Secondary Crusher area and just south of the Mega Pond.	YES	1	B C	1	ABA/WRA
Acid tanks	PP (Figure 5)	The inventory of acid tanks is summarized in Table 2. There are currently four above-ground acid tanks located approximately 1,400 feet southwest of the Phase Four VLT Heap Leach (Figure 5). These tanks held sulfuric acid for crushed ore below at Airmetco Stacker Area. A 50,000-gallon metal sulfuric acid tank is situated within an earth-bermed, plastic-lined secondary containment area. Approximately 30 feet outside of the 50,000-gallon tank secondary containment, an approximate 10,000-gallon acid tank is laying on its side on the ground with chocks to prevent rolling. Two other metal sulfuric acid tanks of approximately 5,000-gallon capacity are located approximately 70 feet northwest of the 50,000-gallon tank. These two tanks are situated in an earth-bermed, plastic-lined secondary containment. Soil within the secondary containment and at the end of an outlet pipe outside the secondary containment is yellow-colored, possible indication of leakage from these tanks. The contents of all the acid tanks have been drained, but the tanks have not been cleaned out. The volume of residual acid in the tanks is unknown.	YES	3	S D	3	ABA/WRA
Airmetco Crusher/Hopper	QQ (Figure 5)	Ore crushing. Components removed and area graded.	YES	1	B C	1	ABA/WRA
Airmetco Stacker Area	RR (Figure 5)	A lined stockpile area existed on the area where the former Stacker was. Acid-treated crushed ore was placed on the stockpile area and allowed to cure. After the Crusher Plant was removed, the stockpile area was excavated and placed on the VLT Leach Pad. All Stacker components have been removed and the area has been graded.	YES	1	B C	1	ABA/WRA
Former Acid Plant	SS	The Acid Plant was located where the Phase III - South Heap Leach Pad is currently. Historic records indicate that the Acid Plant was producing sulfuric acid solution as early as 1954 and continued production of approximately 200 to 450 tons of sulfuric acid per day until at least 1975 (Anaconda, 1954). Calcines in the reactor bed were apparently a by-product of the acid production process, and calcine solution was discharged from the plant to the "north fence" by means of a concrete ditch from the Acid Plant (Figure 4). A wet-scrubber and mist precipitators were also used in the Acid Plant for dust control, to remove calcines and other solids entrained in the off-gas (sulfur dioxide). One of these solids was selenium, which reportedly made up 30% to 40% by mass of the total solids precipitated from the off-gas. This elemental selenium and oxides of selenium, precipitated in the mist precipitators, were apparently treated as marketable by-product. Historical records indicate that "selenium concentrates" were shipped from the mine to a smelting/refining company in New Jersey in 1958 (Anaconda, 1957; ISRC, 1958). A former solution pond (XX, Figure 4) was located to the south of the Acid Plant, shown on a historical photo as containing a reddish-orange solution. There is no longer any indication on-site of the exact location of the pond.	YES	4	B C	4 1 1	ABA/WRA SELENIUM TPH-DRO
Motor Cargo Building	TT	The city of Weed Heights operates the Motor Cargo Building and surrounding fenced-in storage yard for equipment and supplies storage. Several 55-gallon drums of unknown content exist inside the fenced storage yard. The exact nature of operations inside the building is uncertain. The Motor Cargo Building is located northwest of the Core Building, to the southwest of the former Acid Plant.	NO	0	---	0	---
Old Crusher Site	UU	A concrete foundation that exists near the southeast corner of the Phase II Heap Leach Pad was a former crusher area. The foundation has no structures or equipment attached. Next to the foundation is an area where a former acid tank was located. The ground surface around the former tank area is discolored yellow.	YES	1	S D	1	ABA/WRA
Tailings Pumphouses	VV (Figure 2)	Two buildings containing large pumps and associated piping are located east of the Evaporation Ponds (Figure 4). The easternmost building was named the Tailings Pumphouse and contains two large pumps with approximate 16-inch diameter piping entering straight into the ground and underground out to the south. The other building consists of large pumps on a raised concrete deck, associated piping, and a concrete holding tank with level gauge. The exact nature of previous operation of the Tailings Pumphouses, including source area and receiving area of the pumped fluid, is uncertain.	YES	2	S C	2	ABA/WRA
Former Calcine Ditch	WW	Collected dust from the dust suppression process inside the Acid Plant was directed to four calcine launders, concrete troughs covered with steel plates. Waste water from the leaching plant was pumped to the head of each launder to quench the dust and to carry it away. The calcine/waste water was carried along the calcine ditch (Figure 2) to the "disposal area" somewhere north of the Process Area.	YES	2	S C	2	ABA/WRA
Former Acid Plant Pond Site	XX	According to a historical photograph from 1964, a holding pond containing reddish solution was present northwest of the former Acid Plant. The pond is not apparent on available historical maps, and its purpose is unclear.	YES	1	B C	1 1	ABA/WRA VOC
Former Sulfide Ore Stockpile Area and Underground Conveyor Ways	YY	Two underground concrete conveyor-ways exist from the former sulfide ore stockpile to the Sulfide Plant.	NO	0	---	0	---

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Surface Pumps Foundation	ZZ (Figure 2)	An aboveground concrete foundation exists just east of the middle Evaporation Pond in a low area near the northeast boundary of the mine site. The structure is a concrete holding tank approximately four feet deep with a grated inlet on one side at ground surface, and openings in the top that suggest the former presence of large pumps. The structure appears to have collected surface water or fluids from the surrounding low area and pumped it to an unknown location.	YES	1	S C	1	ABA/WRA
Concrete Pump Tank	AAA (Figure 2)	An large ABA/WRAndoned above-ground concrete tank is present east of Well WW-8 at the southern end of the Unlined Evaporation Pond. The tank is approximately 12 feet high and appears to have had pumps attached to an integral concrete platform above the tank. A manhole with an apparent former valve ahead of the tank is present approximately 60 feet to the south of the tank. The nature of former operation of the ABA/WRAndoned tank is uncertain.	YES	1	S C	1	ABA/WRA
Utilities: Sewer Lines, Acid Lines, Spent Solution Lines	Figure 6	Locations of underground utility lines, including sewer lines, gas lines, acid lines, and spent solution lines were found on maps at the mine site. Knowledge of past operations at various buildings should be useful in determining sample locations along these utility lines.	YES	10	B C And B D	10 10 5 5	TPH-DRO VOC OP CH
Above-ground Petroleum Storage Tanks	---	There are currently six above-ground petroleum storage tanks located at the mine site: three tanks are located at the northwest end of the Truck Shop; two are located north of Change House; and the sixth, a used-oil tank, is located north of the Truck Shop. Table 2 summarizes the inventory of aboveground tanks including type, contents and secondary containment.	YES	6	S C	6	TPH-DRO
Wells	---	There are two wells located in the Process Areas under this Work Plan. Well WW-10 is located along the northwest edge of the Sulfide Plant, and WW-23 is located approximately 550 feet northeast of the north end of the Precipitation Plant. Limited well construction information is available on well WW-10, and is provided in the Groundwater Conditions Work Plan. At this time, nothing is known about the unidentified well. All wells will be properly ABA/WRAndoned in accordance with State regulations, under separate work plan.	---	---	---	---	---
Electrical Stations and Sub-stations	---	Several electrical sub-stations exist at the mine site, some of which have transformers that have leaked oil. There are at least 67 transformers on-site, either inoperative or still in use at the mine site, mounted on poles or on concrete pads within fenced-in areas. The building foundation for the former Anaconda power station is partially buried just west of the Administration Building. According to former mine employees, the former Anaconda power station consisted of three one-megawatt generators that were sold when the station was decommissioned.	YES	6	S D	6 6	TPH-DRO PCB
Other buildings, concrete structures, or other sample locations observed during investigation	---	Tibbals Storage Building: This building is located to the northwest of Phase II Leach Pad. The building is owned by Don Tibbals and is on BLM land. Chlorine Addition Station: South of the privately owned bulk fueling station is a building where chlorine was added to the potable water system. The building is sheet metal construction and contains a pump associated with the chlorine treatment process.	YES	10	S C	10	Unknown

* D= Discrete sample; C= Composite sample; S= Surface (0 to 1 ft bgs); B= Below surface (>1 ft bgs)
ABA= Acid Base Accounting.
WRA= Whole Rock Analysis
VOC= Volatile Organic Compounds by GC/MS Capillary Column; Method 8260B.
SVOC= Semi-volatile Organic Compounds by GC/MS Capillary Column; Method 8270C.
OP= Organochlorine Pesticides by Cap Column GC; Method 8081A
PCB= Poly-chlorinated biphenols by Cap Column GC; Method 8082.
CH= Chlorinated Herbicides by GC Cap Column; Method 8151A.
TPH-GRO/DRO= Total Petroleum Hydrocarbons- Gasoline Range Organics / Diesel Range Organics / Non-halogenated Volatiles including by GC/FID; Method 8015B-GRO, DRO.

Table 2. Above-Ground Tank Inventory					
	Location	**Capacity (gallons)**	**Type Contents**	**Secondary Containment**	**Volume Remaining**
1	Truck Shop (inside)	500	Used oil	Unknown	250 gallons
2	Truck Shop (outside)	1,800	Oil	Unknown	~450 gallons
3	Truck Shop (north end)	~5,000	Oil	Yes	Residual
4	Truck Shop (north end)	~5,000	Oil	Yes	~500 gallons
5	Truck Shop (north end)	3,000	Oil	Yes	Residual
6	Filling Station #1	10,000	Diesel	Yes	~600 gallons
7	Filling Station #1	1,000	Gasoline	No	Unknown
8	Acid Tanks	5,000	Sulfuric acid	Yes	Residual
9	Acid Tanks	5,000	Sulfuric acid	Yes	Residual
10	Acid Tanks	50,000	Sulfuric acid	Yes	Residual
11	Acid Tanks	5,000	Sulfuric acid	No	Unknown

Table 3. Analyses and Methods

Analysis	Method / Procedure	Detection Limit
Static Acid-Base Accounting (ABA), with reporting for acid potential (AP), neutralization potential (NP), net neutralization potential (NNP), and ratios for NP/AP.	BC-Acid Rock Drainage Prediction Manual, 6.2-11 Modified ABA or As referenced.	NA
pH	SW 9045 EPA 150.1	1.0 pH units
Specific conductivity	SM 2510B	1.0 umhos/cm
Gasoline and Diesel Range Organics (GRO/DRO) and Total Petroleum Hydrocarbons (TPH)	EPA Method 8015B modified full range	Diesel- 10 mg/kg Gasoline- 10 mg/kg Oil- 50 mg/kg
Volatile Organic Compounds (VOC)	EPA Method 8260B	20 to 40 µg/kg
Semi-volatile Organic Compounds (SVOC)	EPA Method 8270C	660 to 13,000 µg/kg
Polychorinated Biphenyls (PCB)	EPA Method 8082	33 µg/kg
Organochlorine Pesticides (OP)	EPA Method 8081A	Depends on compound
Chlorinated Herbicides (CH)	EPA Method 8151A	Depends on compound
Agricultural Parameters		
N-P-K (nitrogen-phosphorous-potassium)	EPA 300.0, EPA 365.3, EPA 200.7 and SM 4500-(N,P,K)	0.02 mg/L
Sodium Absorption Ratio	ASTM	5 mg/L
Ca-Mg-Na (calcium-magnesium-sodium)	EPA 200/6000	0.1 mg/L
B-Cl (boron-chlorine)	EPA 212.3 and EPA 300.0/SM 4500-Cl	B=0.05 mg/L Cl=0.1 mg/L
Whole Rock Analysis		
Aluminum	SW – 846 6010A	0.05 mg/kg
Antimony	SW – 846 6020	1 mg/kg
Arsenic	SW – 846 6020	1 mg/kg
Barium	SW – 846 6020	1 mg/kg
Beryllium	SW – 846 6010A	0.1 mg/kg
Boron	SW – 846 6010A	0.05 mg/kg
Cadmium	SW – 846 6020	1 mg/kg
Calcium	SW – 846 6010A	0.1 mg/kg
Chromium	SW – 846 6020	1 mg/kg
Cobalt	SW – 846 6020	1 mg/kg
Copper	SW – 846 6020	1 mg/kg
Iron	SW – 846 6010A	0.05 mg/kg
Lead	SW – 846 6020	1 mg/kg
Magnesium	SW – 846 6010A	0.1 mg/kg
Manganese	SW – 846 6020	1 mg/kg
Mercury	SW - 846 7471	0.05 mg/kg
Molybdenum	SW – 846 6020	1 mg/kg
Nickel	SW – 846 6020	1 mg/kg
Potassium	SW – 846 6010A	0.5 mg/kg
Selenium	SW – 846 6020	1 mg/kg
Silver	SW – 846 6020	1 mg/kg
Sodium	SW – 846 6010A	0.1 mg/kg
Thallium	SW – 846 6020	1 mg/kg
Vanadium	SW – 846 6020	1 mg/kg
Zinc	SW – 846 6020	10 mg/kg

ASTM= American Society for Testing and Materials
EPA= Environmental Protection Agency
SM= Standard Methods
NA= Not applicable